

## Abstract

A computer-implemented system and method for generating a hardware implementation of graphical code. The method comprises first creating a graphical program. A first portion of the graphical program may optionally be compiled into machine code for execution by a CPU. A second portion of the graphical program is converted into a hardware implementation according to the present invention. The operation of converting the graphical program into a hardware implementation comprises exporting the second portion of the graphical program into a hardware description, wherein the hardware description describes a hardware implementation of the second portion of the graphical program, and then configuring a programmable hardware element utilizing the hardware description to produce a configured hardware element. The configured hardware element thus implements a hardware implementation of the second portion of the graphical program.